

SPECIAL AIRWORTHINESS INFORMATION BULLETIN

Aircraft Certification Service
Washington, DC



U.S. Department
of Transportation

**Federal Aviation
Administration**

NE-04-45
January 16, 2004

www.faa.gov - Search "SAIBs"

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin (SAIB) alerts you, owners and operators of **Woodward Governor propeller governors on reciprocating engines**, that the propeller governors may have a non-heat treated flyweight head, which could lead to loss of speed governing on the propeller governor.

Background

On November 20, 2002, 19:00 local time, the pilots of a Twin Commander (Rockwell International) Model 700, noticed the R/H engine going into over speed condition. They immediately tried to reduce engine RPM by throttle and prop control with no success. They elected to shutdown and secure the R/H engine. They contacted the Toronto Center, declaring an emergency. They landed safely with no damage to the airframe or injury. We have confirmed that the propeller governor had an internal failure which caused the over speed condition. Inspection of the propeller governor found a 30-RPM over speed with full control of the governor over the entire RPM range.

The tear down inspection found that the drive spring was disconnected from the driver which allowed the flyweight head to rotate against the ends of two screws, causing the end of the screws to shear off. When the screws sheared off, the driver was no longer driving the flyweight head. The drive spring wore a groove in the mating surface of the flyweight head. It appears that this groove allowed the tang of the drive spring to come out of its hole in the driver.

Woodward Governor issued Service Bulletin (SB) 82402-61-001, December 8, 2003, to identify the possible affected governors by serial numbers, and inspection criteria for flyweight head and driver assemblies used on certain propeller governors. Detail inspection and part replacement descriptions are listed in temporary revision of Operation Maintenance Manuals 33092A, 33169, and 33194, December 8, 2003.

Three assemblies have shown excessive wear from the potential suspect lot.

The affected models for the 4508-042-flyweight head assembly are listed below:

210554	210727	A210703	A210803	B210572	C210719	F210882	R210571
210562	210731	A210709	A210804	B210709	C210801	H210800	R210573
210704	210732	A210710	A210805	B210710	D210710	J210800	R210650
210712	210733	A210711	A210806	B210713	D210713	L210571	R210707
210714	210751	A210713	A210839	B210719	D210719	L210573	R210755
210717	210753	A210719	A210880	B210800	D210800	L210650	R210880
210718	210758	A210728	A210881	B210801	D210882	L210755	R210909
210720	210907	A210787	A210883	B210883	E210710	L210880	R210913
210723	210918	A210800	A210885	C210572	E210713	L210909	R210924
210724	210934	A210801	A210899	C210710	F210710	L210913	
210726	A210572	A210802	A210924	C210713	F210800	L210924	

Recommendation

We recommend that you check serial numbers in accordance with Woodward Governor's SB. If affected, please inspect propeller governors in accordance with temporary revision of Operation Maintenance Manuals 33092A, 33169, and 33194, dated December 8, 2003.

For Further Information Contact

Chung-Der Young, Aerospace Engineer, FAA Chicago Aircraft Certification Office, Propulsion Branch, ACE-118C, 2300 East Devon Avenue, Des Plaines, IL, 60018; phone (847) 294 7309; fax: (847) 294-7834; email: chung-der.young@faa.gov